

What is claimed is:

~~SUB 31~~

1. An image pickup system comprising:  
an image pickup apparatus including an image sensor for photo-electrically converting a picked-up object image into an electrical signal, a video signal generating part for forming a video signal from the electrical signal, a color space converting part for converting a color space of the video signal, and an interface part for externally transferring the video signal; and  
a control part for controlling said image pickup apparatus through said interface part,  
wherein the video signal is compressed according to a look-up table held within said color space converting part.

2. A system according to claim 1, wherein said color space converting part is arranged to convert information of a plurality of kinds corresponding to picture elements into predetermined information in accordance with said look-up table.

3. A system according to claim 1, wherein said control part and said color space converting part are arranged to hold said look-up table in common.

4. A system according to claim 1, wherein said color

space converting part is provided with a plurality of look-up tables, and wherein said control part is arranged to arbitrarily select one of said look-up tables.

5. A system according to claim 1, wherein said look-up table is held in a ROM disposed within said color space converting part.

6. A system according to claim 5, wherein said image pickup apparatus has attribute information about the interface part and said look-up table held in common within said ROM.

7. A system according to claim 1, wherein said look-up table is held in a reloadable memory disposed within said color space converting part.

8. A system according to claim 7, wherein said look-up table is recorded by said control part through said interface part into said reloadable memory disposed within said color space converting part.

9. A system according to claim 1, wherein said look-up table is held within said color space converting part in the form of a logic circuit.

SUP. (22) (10). An image pickup apparatus comprising:  
an image sensor for photo-electrically converting

a picked-up object image into an electrical signal;  
a video signal generating part for forming a video signal from the electrical signal;  
a color space converting part for converting a color space of the video signal; and  
an interface part for externally transferring the video signal,  
wherein the video signal is compressed according to a look-up table disposed within said color space converting part.

11. An apparatus according to claim 10, wherein said color space converting part is arranged to convert information of a plurality of kinds corresponding to picture elements into predetermined information in accordance with <sup>a</sup> said look-up table.

12. An apparatus according to claim 10, wherein a control part for controlling the transfer of video image data through said interface part is provided externally of a body of said image pickup apparatus.

13. An apparatus according to claim 12, wherein said control part and said color space converting part are arranged to hold <sup>a</sup> said look-up table in common.

14. An apparatus according to claim 12, wherein said color space converting part is provided with a

plurality of look-up tables, and wherein said control part is arranged to arbitrarily select one of said look-up tables.

15. An apparatus according to claim 10, wherein <sup>a</sup> said look-up table is held in a ROM disposed within said color space converting part.

16. An apparatus according to claim 15, wherein attribute information about said interface part and said look-up table are held in common within said ROM.

17. An apparatus according to claim 12, wherein <sup>a</sup> said look-up table is held in a reloadable memory disposed within said color space converting part.

18. An apparatus according to claim 17, wherein said look-up table is recorded by said control part through said interface part into said reloadable memory disposed within said color space converting part.

19. An apparatus according to claim 10, wherein <sup>a</sup> said look-up table is held within said color space converting part in the form of a logic circuit.

SUB 23 20. An image pickup unit comprising:  
image pickup means for picking up an optical image to form a picked-up image signal;

interface means for performing communication with an external signal processing apparatus; and

compression control means for controlling and changing a compression characteristic for the picked-up image signal of said image pickup means according to a control signal supplied from said external signal processing apparatus through said interface means.

21. A unit according to claim 20, wherein said image pickup unit is arranged to be removably attachable to said external signal processing apparatus.

22. A unit according to claim 20, wherein said compression control means is arranged to change the compression characteristic by converting a color space of the picked-up image signal.

23. A unit according to claim 20, wherein said compression control means is provided with a plurality of look-up tables for converting a color space of the picked-up image signal.

SUB 37 (24). A picked-up image signal processing apparatus comprising:

interface means for performing communication with an image pickup unit including image pickup means for picking up an optical image to form a picked-up image signal; and

transmission control means for transmitting to said image pickup unit through said interface means a control signal for controlling and changing a compression characteristic of said image pickup means.

25. An apparatus according to claim 24, wherein said image pickup unit is arranged to be removably attachable to said picked-up image signal processing apparatus.

26. An apparatus according to claim 24, wherein said transmission control means is arranged to change through said interface means the compression characteristic of said image pickup means by converting a color space of the picked-up image signal.

27. An apparatus according to claim 24, further comprising image display means, wherein said transmission control means is arranged to change the compression characteristic of said image pickup means through said interface means according to a capability of said image display means.

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